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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,096	06/15/2000	David J. Diller	1073.060	8927
23405	7590	03/05/2004	EXAMINER	
HESLIN ROTHENBERG FARLEY & MESITI PC			MORAN, MARJORIE A	
5 COLUMBIA CIRCLE			ART UNIT	
ALBANY, NY 12203			PAPER NUMBER	

1631

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Advisory Action

Application No.

09/595,096

Applicant(s)

DILLER ET AL.

Examiner

Marjorie A. Moran

Art Unit

1631

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 17 December 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-30.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☒ Other: Interview Summary

Marjorie A. Moran
Marjorie A. Moran
Primary Examiner
Art Unit: 1631

Continuation of 2. NOTE: the limitation to identify ligands likely to have therapeutic activity is a new issue requiring further search and consideration..

Continuation of 5. does NOT place the application in condition for allowance because: the claims are still nonstatutory and do not have utility for reasons previously set forth. In response to applicant's arguments that all the claims recite a concrete, tangible and useful result and are therefore statutory, applicant is reminded that the claims are directed to different categories of invention. A process (method) limited to be implemented by a computer may be subject to this analysis. However, claims directed to a physical device or apparatus (e.g. a computer-readable medium) are necessarily statutory. This distinction is reflected in the rejections.

With regard to the "computer-aided system", it is again noted that the claims directed to the system do not recite any structural or physical limitations such that it is clear that the "system" is intended to be a device and not just a series of instructions to a computer. It is further noted that that claims do not actually recite a "computer".

As set forth in MPEP 2106.IV.B.1(a): "computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim. See paragraph IV.B.2(a), below."

The fact that the program intended to be implemented by the system and/or computer-readable medium is the "same" as the computer-implemented method of other claims does not affect the category of invention or statutory status of the claims reciting the program.

In response to the argument that a computer-implemented method which recites a concrete, tangible and useful result is statutory, the examiner fully agrees. The issue with regard to instant claims 1-10 is whether the claims actually recite a concrete, tangible and useful result. The preamble of claim 1 recites a method of docking a ligand to a protein, wherein the apparent result of the method is optimization of a POSITION of a ligand relative to a protein. What useful information does one skilled in the art derive from this information? Applicant argues that the method may be used in drug design. At a minimum, the result does not serve to reduce the pool of putative therapeutic agents, as would be indicated by method steps of comparing ligand binding, or by sorting ligands according to desired binding properties, etc.

For all of the reasons previously set forth and set forth above, the rejections are maintained.